

We claim:

1. A method of treatment of obstructive respiratory diseases by inhalative administration of a pharmaceutically suitable salt of the enantiomerically pure ester (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium in an effective amount to a patient in need thereof.
2. The method according to claim 1, wherein the pharmaceutically suitable salt is selected from the group consisting of fluoride, chloride, bromide and iodide.
3. The method according to claim 1, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium has an enantiomeric purity of minimum 96% enantiomeric excess.
4. The method according to claim 1, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium has an enantiomeric purity of minimum 97% enantiomeric excess.
5. The method according to claim 1, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium has an enantiomeric purity of minimum 98% enantiomeric excess.

6. The method according to claim 1, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of an aerosol formulation.

7. The method according to claim 1, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of a dry powder formulation.

8. The method according to claim 1, wherein the obstructive respiratory disease is selected from the group consisting of bronchial asthma and chronic bronchitis.

9. The method according to claim 2, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of an aerosol formulation.

10. The method according to claim 2, wherein the (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of a dry powder formulation.

11. The method according to claim 2, wherein the obstructive respiratory disease is selected from the group consisting of bronchial asthma and chronic bronchitis.

12. A method of treatment of obstructive respiratory diseases by inhalative administration of a pharmaceutically suitable salt of the enantiomerically pure ester (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium in an effective amount to a patient in need thereof.

13. The method according to claim 12, wherein the pharmaceutically suitable salt is selected from the group consisting of fluoride, chloride, bromide and iodide.

14. The method according to claim 12, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium has an enantiomeric purity of minimum 96% enantiomeric excess.

15. The method according to claim 12, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium has an enantiomeric purity of minimum 97% enantiomeric excess.

16. The method according to claim 12, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium has an enantiomeric purity of minimum 98% enantiomeric excess.

17. The method according to claim 12, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of an aerosol formulation.

18. The method according to claim 12, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of a dry powder formulation.

19. The method according to claim 12, wherein the obstructive respiratory disease is selected from the group consisting of bronchial asthma and chronic bronchitis.

20. The method according to claim 13, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of an aerosol formulation.

21. The method according to claim 13, wherein the (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium salt is administered in the form of a dry powder formulation.

22. The method according to claim 13, wherein the obstructive respiratory disease is selected from the group consisting of bronchial asthma and chronic bronchitis.

23. A method of treatment of spasms of smooth muscles by administration of a pharmaceutically suitable salt of an enantiomerically pure ester selected from the group consisting of

(3R,2'R) -3-[cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium, ((3S,2'R)-)-3-

[cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium, (3R,2'R) -3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium, and (3S,2'R) --3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium in an effective amount to a patient in need thereof.

24. The method according to claim 23, wherein the pharmaceutically suitable salt is selected from the group consisting of fluoride, chloride, bromide and iodide.

25. The method according to claim 23, wherein said ester has an enantiomeric purity of minimum 96% enantiomeric excess.

26. The method according to claim 23, wherein said ester has an enantiomeric purity of minimum 97% enantiomeric excess.

27. The method according to claim 23, wherein said ester has an enantiomeric purity of minimum 98% enantiomeric excess.

28. The method according to claim 23, wherein said ester is (3R,2'R) -3-[cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium.

29. The method according to claim 23, wherein said ester is (3S,2'R)-3-[cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium.

30. The method according to claim 23, wherein said ester is (3R,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium.

31. The method according to claim 23, wherein said ester is (3S,2'R)-3-[cyclohexylhydroxyphenylacetyl)oxy]-1,1-dimethylpyrrolidinium.

32. The method according to claim 23, wherein said salt is administered by inhalation.

33. The method according to claim 23, wherein said salt is administered by inhalation of an aerosol formulation.

34. The method according to claim 23, wherein said salt is administered by inhalation of a dry powder formulation.

35. The method according to claim 24, wherein said salt is administered by inhalation of an aerosol formulation.

36. The method according to claim 24, wherein said salt is administered by inhalation of a dry powder formulation.